

# South Carolina Comprehensive Wildlife Conservation Strategy

## What is a wildlife action plan?

Congress asked each state to develop a wildlife action plan, known technically as a comprehensive wildlife conservation strategy. These proactive plans examine the health of wildlife and prescribe actions to conserve wildlife and vital habitat before they become more rare and more costly to protect.

## South Carolina snapshot

South Carolina is richly endowed with unbroken coastal vistas, miles of scenic rivers, aged swamps and untouched mountains. Scattered throughout we find places not wild but well-tended, forests and fields, managed for the abundant natural resources that bring many to call this state home. Natural treasures abound in this diversity. Tiny fish like the Christmas darter, named for its jewel toned sides, team in our waters. Fleeting blues and scarlets flash in the skies from the wings of Painted Buntings. Brilliantly striped turtles bask on logs in the sweet southern sunshine.

## South Carolina's planning approach

South Carolina's Comprehensive Wildlife Conservation Strategy emphasizes a co-



Tidal marsh/SCDNR

operative, proactive approach to conservation. Expert review helped to identify the current needs of wildlife in South Carolina. These needs translate into conservation actions that can cross multiple scales, with treatments recommended at the species, habitat and regional level. The result is a guide to conserving the 1,240 species of fish and wildlife that have immediate conservation needs or are key indicators of the diversity and health of the state's wildlife. Public and partner review then helps turn these conservation recommendations into actions.

## Primary challenges to conserving wildlife in South Carolina

As we evaluated the challenges to wildlife species and habitats in our state, eight recurring conservation

*"Our wildlife, our water, and our land are all important parts of the quality of life that uniquely defines our state. An important part of protecting that quality of life lies in South Carolinians working together to conserve those resources, and the South Carolina Comprehensive Wildlife Conservation Strategy outlines a plan for the people of this state to do that."*

– South Carolina Governor Mark Stanford

*"If we invest in conserving wildlife now, we can protect species for future generations. A proactive plan will benefit the health of wildlife and people, and conserve wildlife before they become rarer and more costly to protect."*

– John Frampton, Director South Carolina Department of Natural Resources



Oystercatcher/SCDNR

action areas were identified, including: education and outreach; habitat protection; invasive and nonnative species; private land programs; public land management; regulatory actions; survey and research needs; and urban and developing lands. All of South Carolina's 62 priority actions to address problems and issues fall within these conservation action areas.



Banding a red-cockaded woodpecker/SCDNR

Although there are many issues surrounding conservation of wildlife in South Carolina, three challenges were identified for many species and

habitats throughout the state. The three primary challenges are loss and degradation of habitat, invasive and nonnative species and lack of knowledge about many of our priority species. As land use shifts from rural to urban, this changing landscape affects

the ability of wildlife to thrive. Presence of invasive and nonnative species can result in direct and indirect problems to native wildlife. Through direct competition, habitat destruction, inbreeding and other impacts, nonnative plants and animals present a major challenge to South Carolina's wildlife species. The lack of knowledge about natural history, diversity, abundance and range of many of our priority species also represents a significant challenge in South Carolina. Without a good understanding of all characteristics of wildlife, it is extremely difficult to help temper the changing landscape in the interest of conserving priority species.



Toxaway river/SCDNR

Wildlife	Total number of species	Priority species*	Threatened/endangered species
Marine invertebrates	803	775	0
Freshwater mussels	29	26	1
Freshwater snails	24	4	0
Crayfish	36	23	0
Marine fish	256	163	0
Freshwater and diadromous fish	146	62	1
Reptiles and amphibians	142	52	9
Birds	390**	111	9
Mammals (marine and terrestrial)	106	24	12
<b>Totals</b>	<b>1932</b>	<b>1240</b>	<b>32</b>

\* South Carolina included in this category all species that are currently rare or designated as at-risk, those for which we have little available knowledge and those that have not received adequate conservation attention in the past. Additionally, this list includes species for which South Carolina is "responsible," that is, species that may be common in our state, but are declining or rare elsewhere, as well as those that could provide indication of failing habitats.

\*\* 179 of these are classified as breeding in South Carolina.

### Wildlife highlights

Habitat/species highlights	Wildlife (examples)	Issue (examples)	Action (examples)
<p><b>Pine Savannah--</b></p> <p>Habitats consist of sparse stands of pines, almost always longleaf or loblolly pine, and rich vistas of grasses. Ownership is often a mix of public and private.</p>	<ul style="list-style-type: none"> <li>• Red cockaded woodpecker</li> <li>• fox squirrel</li> <li>• gopher tortoise</li> <li>• Bachman's sparrow</li> <li>• northern yellow bat</li> <li>• Rafinesque's big eared bat</li> <li>• gopher frog</li> <li>• flatwoods salamander</li> </ul>	<ul style="list-style-type: none"> <li>• Pine Savanna is a fire-maintained community. Without fire, Pine Savanna will grow into a much denser forest habitat. Fire suppression and land conversions for agriculture or development place the greatest pressure on this habitat type.</li> </ul>	<ul style="list-style-type: none"> <li>• Restore and enhance impaired habitat, where feasible, including the use of prescribed burning and replanting of native plants.</li> </ul>
<p><b>Cannonball jellyfish, Stomolophus meleagris--</b></p> <p>Not state or federally listed; however, ecologically important because they are the major prey base for endangered leatherback sea turtles (<i>Dermochelys coriacea</i>)</p>		<ul style="list-style-type: none"> <li>• While, abundant along the southeastern and Gulf coasts of the U.S., Cannonball jellyfish are susceptible to harmful algal blooms; oil spills and nonpoint source pollution. Increased demands for jellyfish from Asian markets may encourage a commercial trade in the species.</li> </ul>	<ul style="list-style-type: none"> <li>• Determine the maximum sustainable yield for a harvest fishery. Develop an education program that stresses that cannonball jellyfish are important and active members of the coastal ecosystem and are harmless to humans. If a fishery develops in South Carolina for cannonball jellyfish, it should be monitored and regulated to avoid overexploitation and appropriate harvest techniques should be identified that are protective of other marine species.</li> </ul>
<p><b>Cove Forests of Hemlock and Rhododendron--</b></p> <p>The sheltered coves occur in stream bottoms or on lower hill slopes along small streams. Thickets of hemlock trees and rhododendron bushes dominate the habitat. They will also include rich growth of Christmas ferns and strawberry-bush. In some cases you may also find patches of wildflowers like foamflower or Oconee bell, a plant found only in the Blue Ridge region of South Carolina. Most cove forests are in public ownership though some may be found on private lands.</p>	<ul style="list-style-type: none"> <li>• Shovel-nosed salamander</li> <li>• seepage slope salamander</li> <li>• Swainson's warbler</li> <li>• Acadian flycatcher</li> <li>• Carolina red-backed vole</li> <li>• spotted skunk</li> <li>• Rafinesque's big eared bat</li> <li>• eastern small-footed myotis</li> </ul>	<ul style="list-style-type: none"> <li>• The Hemlock Woolly Adelgid, an introduced insect of Asian origin spreading southward from the Northeastern US, is established at numerous sites in the Southern Blue Ridge Mountains. Most infested Hemlocks will die. There are no control methods currently available for large stands of infected trees though expensive methods can be used for individual infestations.</li> </ul>	<ul style="list-style-type: none"> <li>• Determine the effects of plant and animal invasive and nonnative species (including diseases) on South Carolina's priority species and their habitats. Prevent the spread of existing invasive and non-native species, eliminating them, where possible. Determine the impacts of invasive and non-native species on South Carolina's priority species and habitats used by those species. Strive to prevent the import of additional invasive and non-native species to South Carolina.</li> </ul>

**Recommended actions to conserve South Carolina's wildlife**



Assisting landowners with wildlife foodplots/SCDNR

## Working together for South Carolina's wildlife

From the beginning of the CWCS effort, South Carolina's planning team sought to realize successful partnerships and public involvement in the development of the strategy. Representatives from partner groups were invited to share their ideas with the planning team through focus groups. These partner organizations included federal and state agencies, tribal councils, conservation organizations and non-governmental groups such as local and county planners, developers and

other professionals interested in the fate of conservation in South Carolina. Additionally, SCDNR gathered information from South Carolina's citizens through a series of public meetings that were conducted throughout the state. These meetings allowed people to present their ideas on wildlife priorities and issues of concern. As conservation actions were being developed, SCDNR worked with partners to identify methods for conserving wildlife in several of our conservation action areas. As we move from planning to acting, these same partners will help set priorities and methods for realizing our conservation goals.

Fish survey of the Reedy River/SCDNR



Electrofishing in the Reedy River/SCDNR



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